

ate, positive reinforcement with a maintenance inhaler has the potential for increasing satisfaction and persistence with treatment and improving health status. **METHODS:** Two qualitative studies using structured interviews were conducted to understand patient perceptions associated with feeling an asthma medication working right away and develop a method for quantifying this perception in clinical trials. **RESULTS:** Study I: 56 asthma patients (44 yrs, SD = 18) were asked about the concept of feeling their medication working right away and whether it was important. Respondents described the perception as breathing easier and deeper and felt this would be meaningful and reassuring. Five items, labeled the "Onset of Effect Questionnaire" (OEQ), were developed for use as a weekly diary. Items to identify patients who perceived their medication working right away and those satisfied with the perception were of particular interest. Items were pre-tested via telephone interview ($n = 11$) and found to be clear, comprehensive, and easy to complete. Patients understood the concept and the concise, weekly diary approach. Study II: 39 asthma patients (37 years, SD = 15) participated in cognitive debriefing interviews to test item interpretation and gather additional data on perception and its value. Respondents characterized the items as clear, interpreted "right away" as immediately to <15 minutes after inhalation, and had no difficulty interpreting the 1-week recall. **CONCLUSION:** Patients understand and value the concept of perceiving a maintenance therapy working right away. A concise, weekly recall diary approach can be used to quantify this attribute in clinical trials.

ALLERGY/ASTHMA—Patient-Reported Outcomes

PAA24

ASTHMA CONTROL AND HEALTH-RELATED QUALITY OF LIFE IN CHILDREN

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OBJECTIVES: To determine the relationship between Health-Related Quality of Life (HRQL) and asthma control in children as defined by the Canadian Pediatric Asthma Consensus Guidelines (CPACG). **METHODS:** Cross-sectional data on 879 children aged 1 to 18 from a completed study of children with a diagnosis of asthma were analyzed. The Pediatric Asthma Quality of Life Questionnaire (PAQLQ) was administered by interview and information regarding the following asthma control parameters was collected: daytime symptoms, night-time symptoms, beta2-agonist use, physical activity level, exacerbations, and school absences. The Pearson correlation was calculated between the asthma control parameters satisfied and the PAQLQ domain scores. The level of agreement between the top quintile of each PAQLQ domain (≥ 80 th percentile) and acceptable asthma control (all six parameters satisfied) was evaluated using the kappa statistic to measure agreement beyond chance. This was also done for unacceptable control (four or fewer out of six parameters satisfied) and the bottom quintile PAQLQ scores. **RESULTS:** The correlations between the number of asthma control parameters and the PAQLQ domains were 0.507, 0.467, and 0.474, ($p < 0.0001$) for the symptoms, activity limitations, and emotional function domains respectively. The kappa for the top quintile of each PAQLQ domain and acceptable control was 0.206 for symptoms, 0.117 for activity limitations, and 0.184 for emotional function. The level of agreement

between unacceptable control for the lowest quintiles domains was 0.128, 0.114, and 0.133 for symptoms, activity, and emotional function, respectively. **CONCLUSION:** The strong relationship between asthma control and HRQL supports a shared focus on control and quality of life in the CPACG. The low level of agreement between the control levels and the PAQLQ quintiles suggests further study is needed to determine optimal cut-offs for control levels and the marginal benefits from quality of life measures.

PAA25

IMPACT OF ALLERGIC RHINITIS ON WORK PRODUCTIVITY

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OBJECTIVES: Patients with allergic rhinitis (AR) experience a multitude of symptoms that usually compromise some aspect of lifestyle and work productivity. **METHODS:** A questionnaire was developed and mailed to 2065 patients enrolled in a 500,000 member managed care organization. Patients were identified by diagnostic codes for AR as determined from a retro-examination of medical and prescription claims records from January 1, 2000 to December 31, 2000. A ten-point scale was used to assess the impact of allergy symptoms on work productivity adapted from the Allergy-Specific Work Productivity and Activity Impairment questionnaire. **RESULTS:** On average respondents ($n = 577$) reported one hour of work missed per week because of allergy symptoms (range = 0–32 hours). For patients seeing family physicians, 66 (55.0%) reported that either a blood or skin test was valuable during the process of allergy diagnosis, 82 (73.9%) for allergists, and 56 (65.1%) for self-managed patients who were previously tested. Chi-square and analysis of variance tests also revealed significant differences among three care groups ($p < 0.05$) for years with allergies, symptoms, family history, testing, immunotherapy, test value, and prescribed antihistamine use. Multiple linear regression analysis revealed that sleep, health-related quality of life (HRQoL), certain allergy symptoms and prescribed antihistamines were significantly related to work productivity. **CONCLUSION:** The ability of individuals with AR to engage in productive work is influenced by sleep, HRQoL, specific symptoms, and prescribed antihistamine use. Appropriate clinical evaluation and an accurate diagnosis using either or both specific IgE testing or skin testing is needed to develop a holistic approach for treatment.

PAA26

SOCIOECONOMIC FACTORS RELATED TO ASTHMA CONTROL IN CHILDREN

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OBJECTIVES: To determine the socioeconomic predictors of asthma control in children, as defined by the Canadian Pediatric Asthma Consensus Guidelines (CPACG). **METHODS:** A cross-sectional design was used to analyze data from a completed CIHR-funded study based on 879 children from seven sites in the Greater Toronto Area between 2000–2003. Children were aged 1 to 18 years with a documented diagnosis of asthma and a prescription for an asthma medication in the previous year. Multiple linear regressions were used to analyze asthma control based on six equally weighted control parameters (daytime symptoms, night-time symptoms, need for beta2-agonists, phys-